

# LuxiTune™

Tunable White Light Engines for warm dimming and CCT tuning



# LED ENGIN

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## Introduction to LuxiTune™

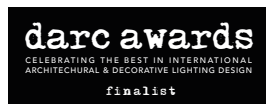
LED Engin's LuxiTune™ is a class-leading compact tunable white light engine solution, with two tuning modes - Warm Dimming and CCT Tuning. It enables ultra-precise and easy-to-control CCT tuning and dimming of downlights and track lights to mimic the tones of white light along the Black Body Curve.

Since its release, LuxiTune™ has continued to evolve and deliver technological success which explains why it has gained an exceptional level of industry recognition.

## What LuxiTune™ delivers

LuxiTune™ delivers tunable, almost natural light in a compact single emitter while maintaining color quality and consistency. The color consistency is 2 MacAdam ellipses at 3000K, full brightness and 3 MacAdam ellipses over the operating temperature range. Combined with the benefits of a long and sustained service life, LuxiTune™ provides high lumen density and Lux-on-Target for directional lighting over a range of beam angles.

The Generation 3.0 light engine supports 0-10V, BLE mesh, DMX 512A, DMX-RDM and DALI control interfaces, and works with a wide range of commercially available controllers. Solutions that work with Zigbee are available for sampling. The light engine is available in different lumen options and delivers flicker-free light with deep dimming to 0.5%. The hardware also comes in two different form factors for integrating in different fixture types.

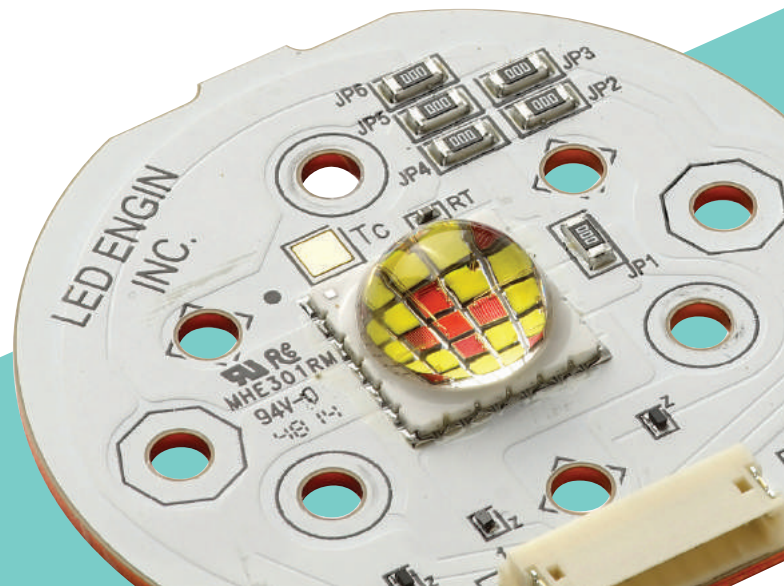


The award-winning LuxiTune™, the first truly tunable LED solution for light fixtures

## Award-winning LuxiTune™

LuxiTune™ has received significant international industry acclaim.

It has won the prestigious Lux Awards, Sapphire Awards, Lighting Design Awards, Product Innovation Awards, ECN Impact Awards and Elektra Awards.



## Warm Dimming Mode

Now restaurants, hotels, entertainment and cultural venues can showcase themselves in their very best light, whatever the time of day or night.

The LuxiTune™ tunable white light engine provides high quality light as it dims from a bright 3000K to a warm 1800K glow along the Black Body Curve and creates the softer tones of sunrise and sunset.



## CCT Tuning Mode

LuxiTune™ offers a Correlated Color Temperature (CCT) tuning function that enables users to independently adjust light intensity and the CCT, between 1800K to 6500K.

The tune curve has been precisely designed to stay a short distance below the Black Body Locus throughout the tuning range, resulting in more vibrant colors.



## Human Centric Lighting

Light is part of our environment and we associate different tones and intensities of light with different functions, time of day and energy levels.

**LuxiTune™** offers a range of warm and cool white light settings at different intensities from the same light engine. White light is now truly tunable to the user's needs.



**Cool Bright**

**Warm Bright**

**Warm Dim**

*Photo: Juno Lighting Group, Des Plaines, Illinois*

### High CRI color quality

**LuxiTune™** emitters maintain a high level of color quality throughout the dimming range, ensuring natural color rendering at all intensity levels.

At 3000K and maximum brightness, **LuxiTune™** engines have a CRI of 90. The CRI is 85 or better throughout the CCT tune range.

## Lux-on-Target™

The compact emitter is coupled with a TIR lens and available in Narrow Flood, Flood and Wide Flood beams.

The TIRs not only control and mix the light, but also shape the beam, delivering the maximum usable light right where you want it with minimal glare.



LuxiTune™ TIR Lens



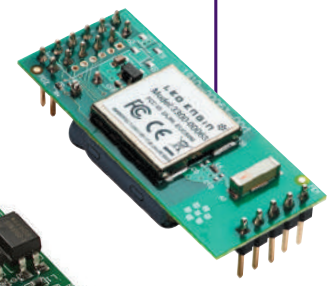
LZP LuxiTune™ (2000lm) TIR	Beam Angle	CBCP @3000K, 100% Intensity (Cd)	Dimensions (D x H)
Narrow Flood	21°	7000	84 x 50mm
Flood	36°	3750	84 x 50mm
Wide Flood	45°	2500	84 x 50mm
LZC LuxiTune™ (1100lm) TIR	Beam Angle	CBCP @3000K, 100% Intensity (Cd)	Dimensions (D x H)
Narrow Flood	24°	2700	47 x 25mm
Flood	34°	1500	47 x 25mm
Wide Flood	45°	1250	47 x 25mm

## Easy and adaptable installation

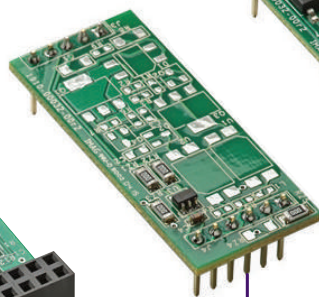
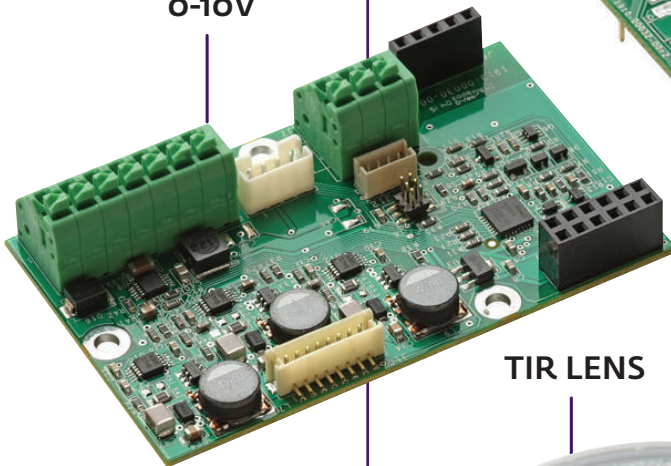
LuxiTune™ uses sophisticated hardware and software configurations that provide pre-programmed halogen-style warm dimming and also adapt easily to other dimming and tuning profiles.

All the customer needs to supply is a DC power supply and a standard dimming controller for 0-10V, DMX 512A, DMX-RDM, DALI or ZigBee. With BLE mesh, light engines can be controlled with an app from a mobile device allowing automated fade scenes for multiple zones.

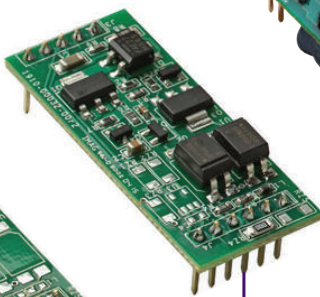
WIRELESS  
Zigbee  
Bluetooth® mesh



0-10V



DMX 512A  
DMX-RDM

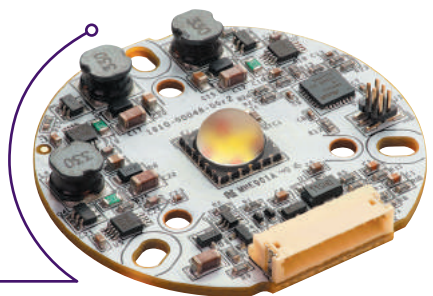


DALI DT8

TIR LENS



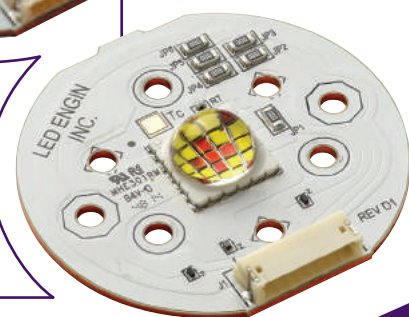
TIR LENS



LuxiTune™  
GEN 2.3  
LZC



LZC  
LZP  
LuxiTune™  
GEN 3.0



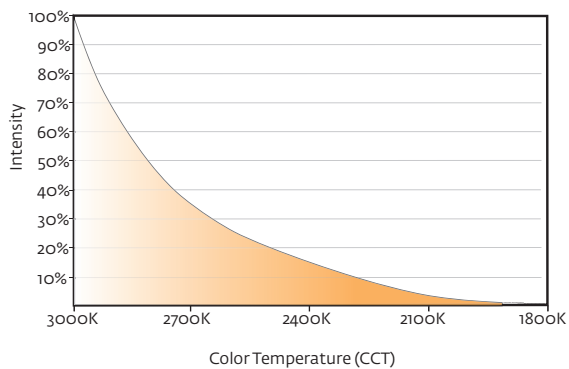
## LuxiTune™ Key Features

- Compatible with standard off-the-shelf DC power supply
- Dims with off-the-shelf 0-10V controllers
- Self learning dimming mode enhances use with different dimmers
- Synchronous control of multiple light sources independent of wire length from dimmer
- DMX 512A, DMX-RDM and DALI DT8 digital control
- Wireless, Bluetooth® LE Mesh and ZigBee controls
- Pre-set warm dimming and CCT tuning profiles that track the Black Body Locus
- Integrated thermal protection
- Smooth dimming from 100% to 0.5%
- Visible and e-flicker free performance for video filming and other flicker-sensitive applications

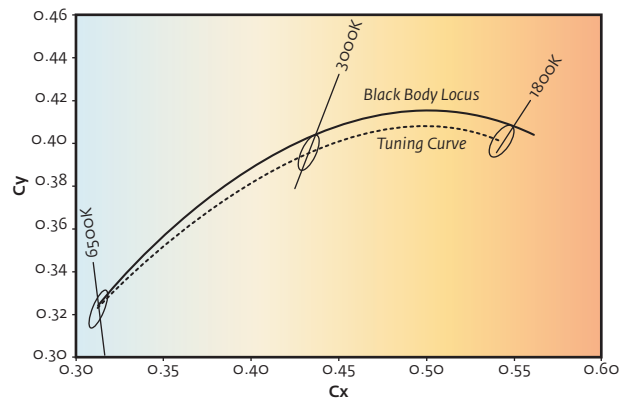
LuxiTune™ Tunable White Light Engine		
*Luminous flux at 3000K, $T_c = 65^\circ\text{C}$	(800lm) / 1100 lm / 2000 lm	
*Light engine efficiency at 3000K, $T_c = 65^\circ\text{C}$	(73lm/W); 63lm / W; 63lm / W	
Typical power consumption at 3000K, $T_c = 65^\circ\text{C}$	(11W) / 17W / 35W	
CCT RANGE		
Warm dim mode	3000K - 1600K	3000K - 1800K
CCT tune mode	4300K - 2100K	6500K - 1800K
CRI@3000K, full intensity	90	
Colour consistency over dimming range & operating temperature	3.0 SDCM	
Colour consistency at 3000K, 100% intensity	2.0 SDCM	

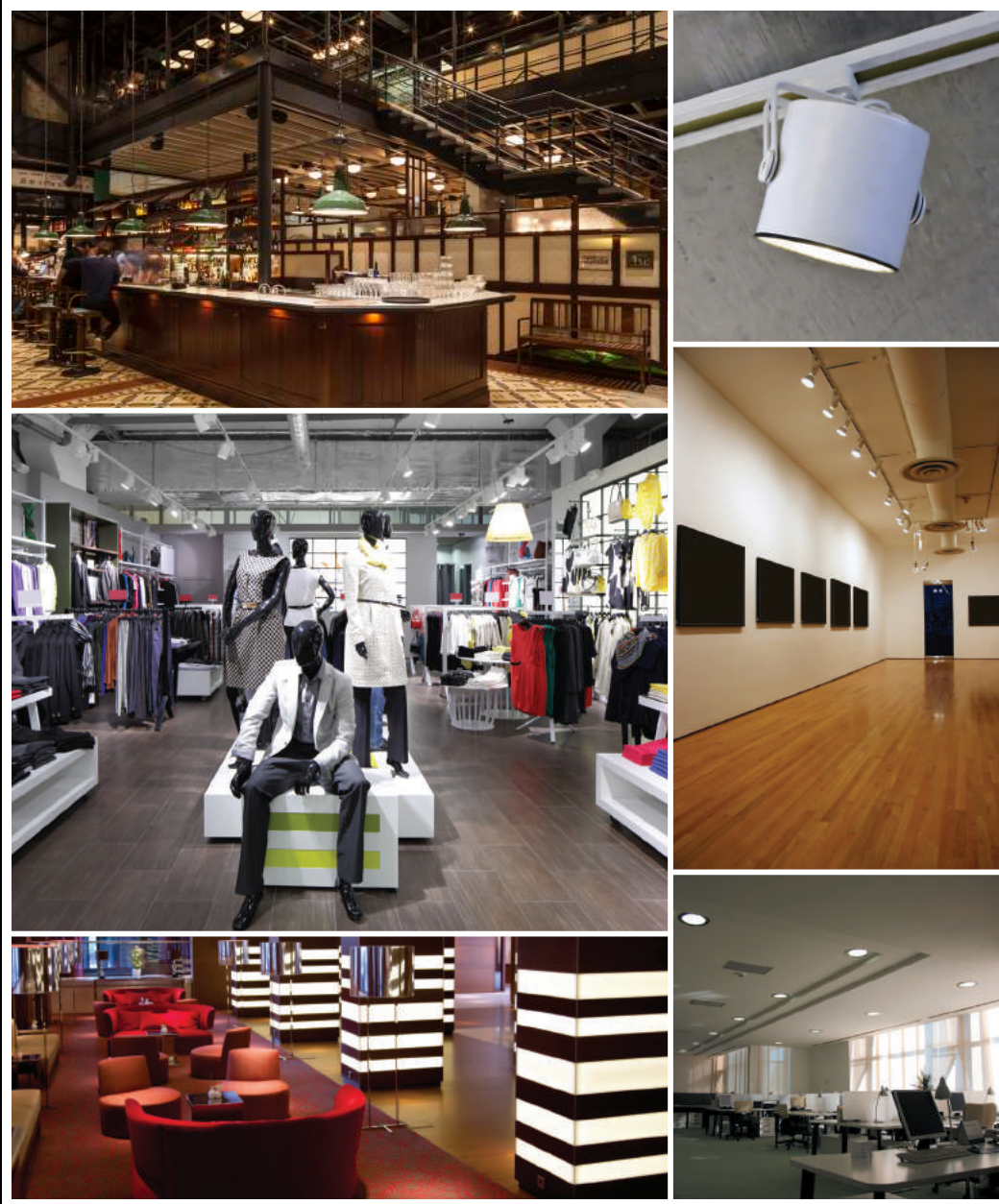
\* based on output from TIR  
 MOQ based availability of 800lm version  
 (shown in brackets)

### Warm dimming from 3000K to 1800K



### Precise color tuning below Black Body Locus





  
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